

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 October 2009 (01.10.2009)

(10) International Publication Number
WO 2009/118772 A1

(51) International Patent Classification:
B65D 81/32 (2006.01)

EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(21) International Application Number:
PCT/IT2009/000119

(22) International Filing Date:
26 March 2009 (26.03.2009)

(25) Filing Language:
Italian

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language:
English

(30) Priority Data:
MN2008A000007 27 March 2008 (27.03.2008) IT

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(71) Applicants and

(72) Inventors: DA LIO, Alessandro [IT/IT]; Via Meucci, 16, 30030 Salzano (Venezia) (IT). DA LIO, Lorenzo [IT/IT]; Via Calabria, 27, 30030 Salzano (Venezia) (IT).

(74) Agent: MALGARINI, Lucia; Via Divisione Acqui, 8/H, 46044 Goito (Mantova) (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ,

(54) Title: DOUBLE CONTAINMENT CAPACITY CONTAINER

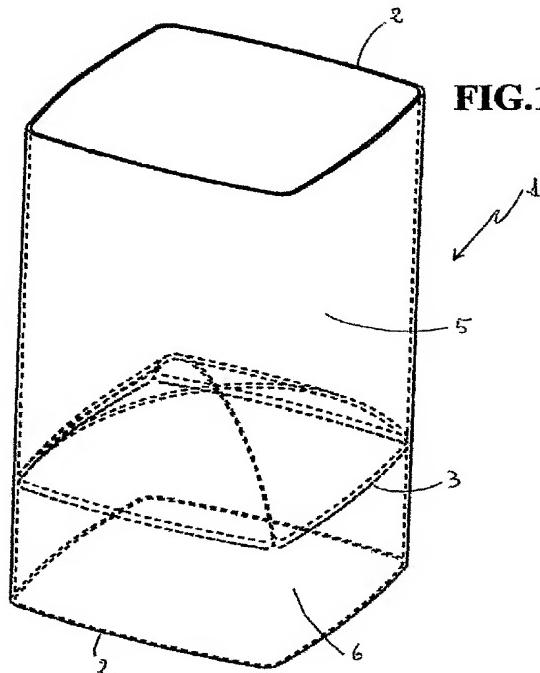


FIG.1

(57) Abstract: The present invention relates to a double containment capacity container of the type comprising one or more lateral walls (2), which mark the limits of the said container, and of a base (3) located in a preset intermediate position inside the lateral walls, so as to obtain a couple of chambers, (5) and (6), one of which is larger than the other and positioned on top of the other, each of which is able to contain a determined quantity of substance (7).

“DOUBLE CONTAINMENT CAPACITY CONTAINER”.

DESCRIPTION

The present invention refers to a double containment capacity container particularly recommended for housing two different quantities of a food substance in a practical and proportionate manner using one sole object.

As it is known, nowadays, there is increasingly limited space for storing objects therefore, as far, for example, as glasses are concerned, in homes, but above all in public establishments, the number of glasses that a manager must have at their disposal is extremely high but the space in which to store them is increasingly reduced.

Furthermore, in particular in discotheques, there are prevalently two types of drinks consumed: one drink type is spirits, where the glass needs to have a reduced capacity and the other is long drinks or soft drinks, where the glass must have a larger capacity.

The need to have more than one set of glasses entails costs to outfit the establishment with glasses and requires a continuous restocking of different sizes and shapes, therefore management becomes rather demanding, apart from the fact that the glasses of different sizes, shapes, capacities, etc. require separate places in which to store them, leading to the need, for example, for several shelves.

Furthermore, the realisation of glasses of different sizes requires the presence, upstream, of several production lines and of dies of different sizes with costs that have repercussions on the final cost of the said

glasses. In addition, storeroom management costs are always rather high therefore the manager tries to be able to contain and optimise them by trying to reduce the supplies present.

Changing sector and talking, for example, of bowls or containers for ice creams, for the manager of either an ice cream parlour or a café, it is necessary to have various sizes available therefore it is indispensable, also in this case, to have a certain assortment of bowls in the storeroom and it is not guaranteed that all of them are used and in the same quantity, as there are periods in which the larger capacity ones are used more while in other moments the smaller sized ones are used. The situation illustrated above entails the need to have an ample assortment of bowls of all sizes in stock, with resulting costs and space occupied.

In addition to the situation illustrated so far, it is known that, for example, as regards camping equipment, there is a need to have containers and accessories able to fulfil several functions with a single object so that the space occupied is reduced to a minimum but functionality is maximum.

Furthermore, there are containers currently present on the market, which feature dividers inside them which create two compartments to contain, for example, chocolate in one compartment and biscuits in the other. This type of container is generally sealed with a film of foil which is ripped off when one decides to use the contents thereof.

The containers just described feature one sole cover therefore it is not possible to access solely one compartment at a time, and once the

container has been opened, all the contents thereof are exposed and must be consumed or otherwise thrown away.

The aim of the present invention is essentially to solve the problems of the commonly known technique overcoming the drawbacks described by means of a double containment capacity container, able to contain, in an adequate manner, two different quantities of substances.

A second aim of the present invention is to have a double containment capacity container which is extremely practical and convenient to use.

A third aim of the present invention is to have a double containment capacity container which does not require different places to store it and allows the space occupied in the storeroom and the management costs to be reduced.

A further aim of the present invention is to have a double containment capacity container which has a simple structure, occupies little space, is stackable, and is easy to realise and use.

A still further aim of the present invention is to have a double containment capacity container which allows two substances to be contained contemporaneously and separately and which are also usable one at a time and at different moments.

A further and not final aim of the present invention is to realise a double containment capacity container which is simple to realise and works well.

These aims and others besides, which will better emerge over the course of the present description, are essentially achieved by means of

a double containment capacity container, as outlined in the claims below.

Further characteristics and advantages will better emerge in the detailed description of a double containment capacity container according to the present invention, provided in the form of a non-limiting example, with reference to the accompanying drawings, in which:

- figure 1 shows, schematically and from a perspective view, a double containment capacity container as per the present invention;
- figure 2 shows, schematically and from a lateral view, the container in figure 1;
- figure 3 shows, schematically and from a perspective view, the container in figure 1 in a different operational condition;
- figure 4 shows, schematically and from a lateral view, the container in figure 3;
- figure 5 shows, schematically and from an overhead view, the container in question;
- figure 6 shows, schematically and from a perspective view, the container in figure 3 in operational condition;
- figure 7 shows, schematically and from a perspective view, the container in figure 1 in operational condition;
- figure 8 shows, schematically and from a sectioned view, the container in figure 3;

- figure 9 shows, schematically and from a perspective view, a container according to the present invention equipped with a seal.

With reference to the said figures, and in particular figure 1, 1 denotes the double containment capacity container as a whole, according to the present invention.

The container 1 is essentially constituted of one or more lateral walls 2, which mark the limits of the said container, and of a base 3 located in a preset intermediate position inside the lateral walls, as shown in figure 1.

In more detail, the lateral walls can compose a container having any cylindrically shaped configuration, with a double frustum of cone or of pyramid or a quadrangular section, as show in the figures.

The base 3 features a flat configuration which is orthogonal to the lateral walls or arched or partially arched and partially flat, as shown in figure 8.

According to the present invention, the container in question features the characteristic that it has a pair of chambers 5 and 6, one of which is larger than the other and stacked on top of the other, each one being able to contain a determined quantity of substance 7, as shown in figure 6 and figure 7. In particular, container 1 proves stackable, as the smaller chamber 6 is able to enter the larger chamber 5.

The material with which the container is realised can be plastic, glass, metal, cardboard, polystyrene, material for food use, biocompatible and biodegradable materials, etc or, in any case, any further material

which meets the aim of containing food substances, whether liquid or solid.

In addition to everything illustrated so far, the container can be sealed with a sealing element 4, such as a lid, on one or both sides, as shown in figure 9. In greater detail, the sealing element 4 allows the container to be sealed using pressure or by means of screwing or by engagement, etc. Furthermore, the sealing element 4 can be large enough to house the substance inside it in such a way as to become, in its turn, a further container, so as to be able to use a chamber, for example, for drinking and to be able to pour the contents of the other chamber into the sealing element space without running the risk of making the contents thereof fall. In addition, the container 1, once sealed with the sealing element 4, also proves easily stackable in this condition therefore it becomes very easy and simple to transport several containers containing food substances.

After the predominantly structural description above, the operation of the invention in question will now be outlined.

When the container in question has the function of a glass, its operation essentially entails containing liquids, like an ordinary glass, but with the particularity that it is able to contain, for example, a spirit, where the quantity of liquid is contained in chamber 6, while the chamber 5 becomes the resting base for the glass, while in the event of a soft drink or a long drink, the chamber 5 - which has a larger capacity- is used and the chamber 6 becomes the resting base for the glass.

Thus, in a bar one sole type of glass is sufficient to meet and fulfil two different requirements, also meeting aesthetic requirements in terms of presentation of the glass and the contents thereof, since a small quantity of liquid in very large glass would be unattractive.

In particular, at present, there is a rule which forbids consumption, for example, of an alcoholic drink while standing outside a drinking establishment, therefore it is not possible to go outside with a glass, only with a sealed container. The container in question allows one to drink outside as it is possible to leave the establishment with the container sealed by the lid and then sip the drink when and where one likes since the container can be sealed or, for example, a straw can be inserted into the lid, with the further possibility of having salty crackers, peanuts or other such foods in the other chamber.

When, on the other hand, one has to serve a small ice cream, the smaller chamber is used, while for an ice cream composed, for example, of three or four scoops and/or with fruit, the larger chamber is used and the unused chamber acts a base for the bowl. In particular, the unused chamber becomes a handgrip for the bowl so that the ice cream can also be eaten while walking. Furthermore, the manager of the bar/cafe or the ice cream parlour is able to have a much smaller stock of bowls, and therefore restocking costs are lower, with definite savings in terms of management and less money tied up, in addition to less space occupied since they are also stackable.

Finally, when the container must contain two different substances each one of these can be housed in a chamber of the container and sealed

with a lid, therefore the user can open one chamber at a time, depending on what they prefer, since there is also the possibility of resealing the chamber with the lid as shown in figure 9.

Thus the present invention achieves the aims set.

The double containment capacity container in question is extremely simple and practical. In fact, in the case of a glass, instead of having two different sized glasses, it is possible to use a single element to meet the requirements of pouring two different types of beverages, such as, for example, spirits or long drinks or soft drinks. Advantageously, the container in question proves very practical and functional to stack.

In particular, for camping accessories, the container in question with a single element is able to fulfil the function of a glass with the larger chamber and, for example, of a coffee cup with the smaller chamber, occupying decidedly less space.

Furthermore, the container in question, in addition to liquids, also allows solid foods to be contained, such as ice cream, allowing two different quantities of ice cream to be served with the same container without having to have two different sized bowls.

Advantageously, the container can contain a soft drink in one compartment and a dessert, a biscuit or other such foodstuff in the other and can be sealed with a lid.

The container in question is able to fulfil the function performed until now by two separate containers, which had to be kept together with

packaging or other means, via one sole element which proves more practical and convenient to use, transport and pack.

A further advantage of the container in question derives from the fact that it is possible to considerably reduce the stocks of the containers, with a consequent reduction in the costs of management of the stocks, in addition to the fact that it becomes simpler to replace the same container rather than two different containers.

Finally, since the container in question fulfils the function of two objects contemporaneously, it allows savings in production costs as, for example, a single die suffices instead of two, as occurred in the commonly known technique.

A further but not final advantage of the present invention is that it proves notably easy to use, simple to realise and works well.

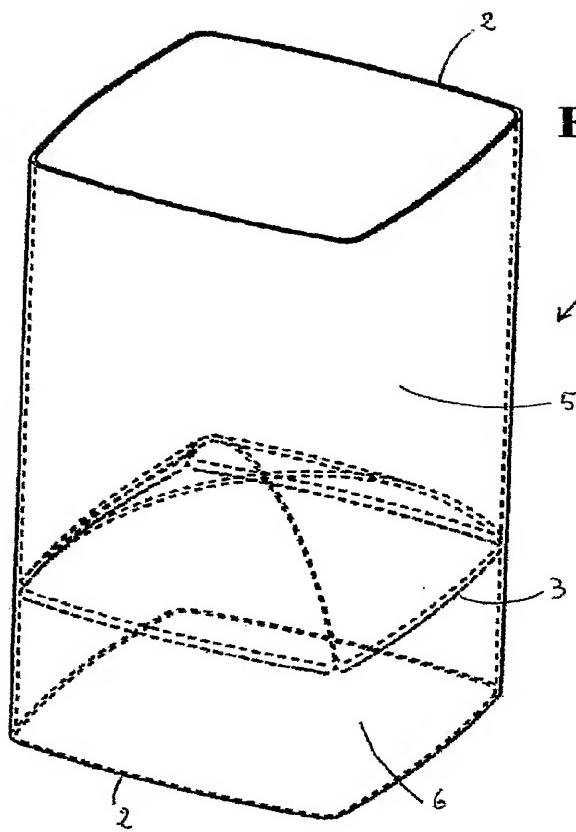
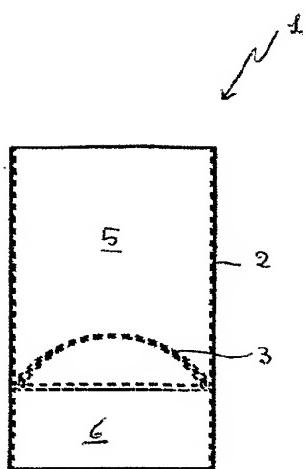
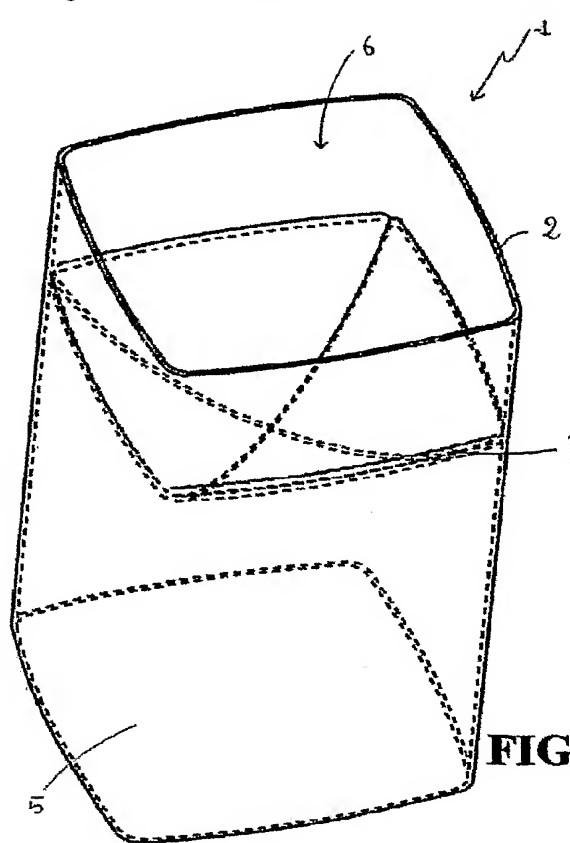
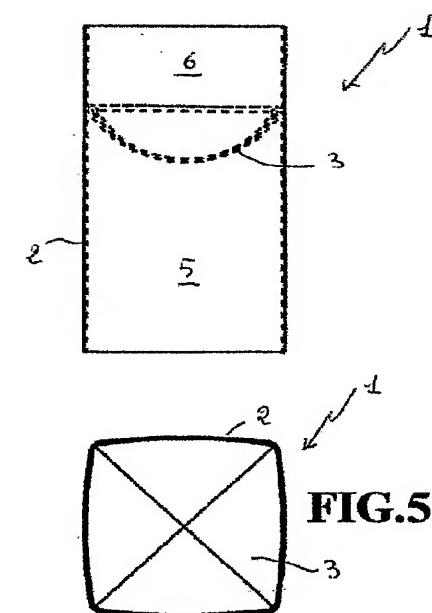
Naturally, further modifications or variants may be applied to the present invention while remaining within the scope of the invention that characterises it.

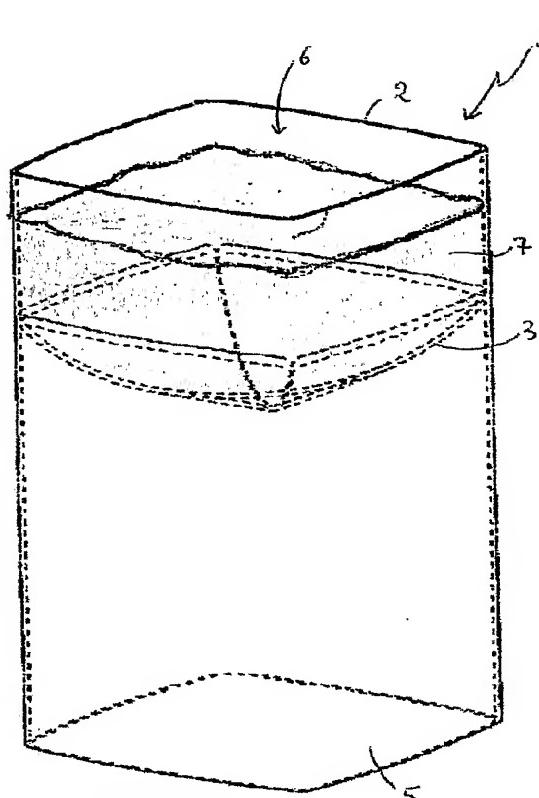
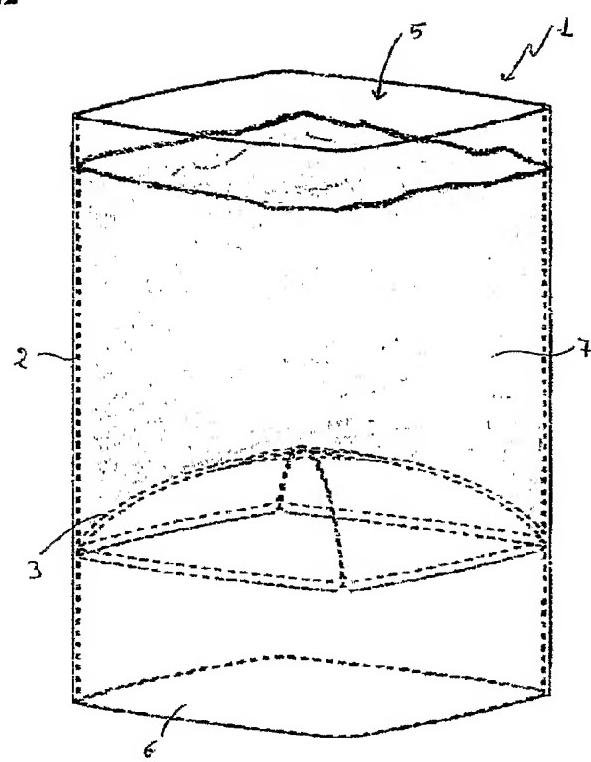
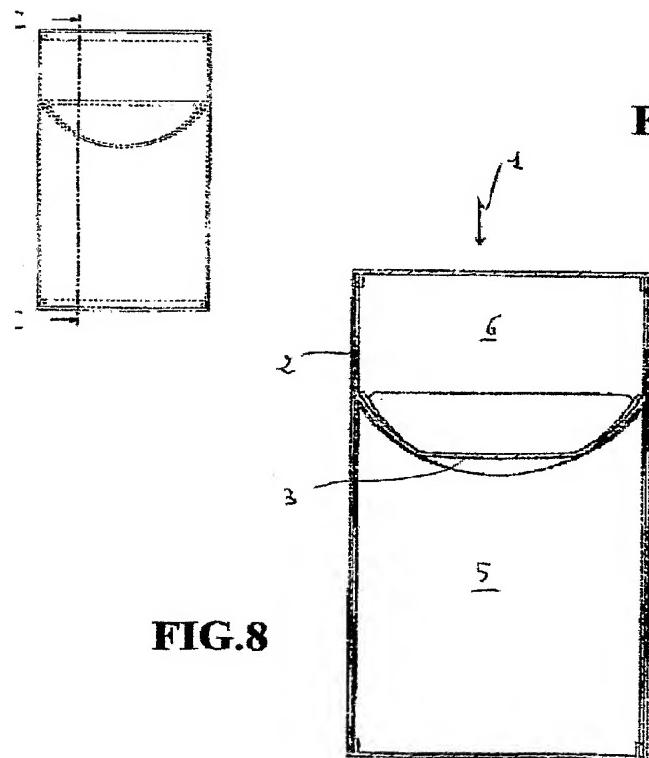
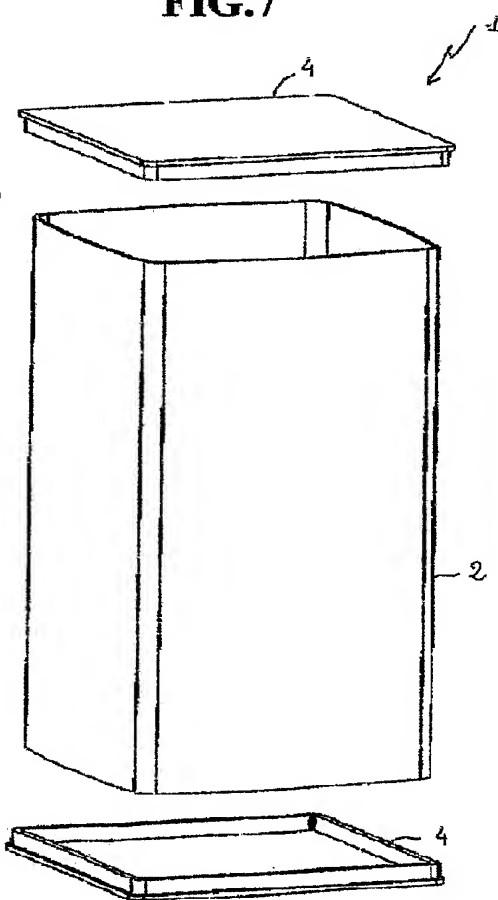
CLAIMS

- 1) A double containment capacity container characterised by the fact that the said container is essentially constituted of one or more lateral walls (2), which mark the limits of the said container, and of a base (3) located in a preset intermediate position inside the lateral walls so as to be characterised by having a couple of chambers, (5) and (6), one of which is larger than the other and is positioned on top of the other, each one being able to contain a determined quantity of substance (7).
- 2) A double containment capacity container according to claim 1, characterised by the fact that the said base (3) features a flat configuration which proves orthogonal to the lateral walls, or arched or partly flat and partly arched.
- 3) A double containment capacity container according to claim 1, characterised by the fact that each chamber (5 and 6) can be sealed with a sealing element (4), such as a lid.
- 4) A double containment capacity container according to claim 1, characterised by the fact that the lateral walls (2) can make up a container with any configuration of a cylindrical form, with a double frustum of cone or of pyramid or a quadrangular section.
- 5) A double containment capacity container according to claim 1, characterised by the fact that the said container is realised with plastic material, glass, metal, cardboard, polystyrene, material for food use, biocompatible and/or biodegradable material or

any other material designed to contain food substances, whether liquid or solid.

- 6) A double containment capacity container according to claim 3, characterised by the fact that the said sealing element (4) allows one to seal the container with pressure or via screwing or engagement etc.
- 7) A double containment capacity container according to claim 3, characterised by the fact that the said sealing element (4) can be large enough to house the substance present in the chamber which it seals in order to become, in its turn, a further container.
- 8) A double containment capacity container according to claim 1, characterised by the fact that the said container is stackable.

**FIG.1****FIG.2****FIG.3****FIG.4****FIG.5**

**FIG.6****FIG.7****FIG.8****FIG.9**

INTERNATIONAL SEARCH REPORT

International application No
PCT/IT2009/000119

A. CLASSIFICATION OF SUBJECT MATTER
INV. B65D81/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched: (classification system followed by classification symbols)
B65D A47G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 281 895 A (KEELEANNE PROMOTIONS INTERNATI [GB]) 22 March 1995 (1995-03-22) abstract; claims 1,4 page 7, last paragraph – page 8, paragraph 1; figure 6 -----	1-8
X	US 4 078 686 A (KARESH MYRNA M) 14 March 1978 (1978-03-14) abstract; figure 1 column 1, line 45 – line 59 -----	1-8
X	US 2007/215640 A1 (BITTON EDDY [US]) 20 September 2007 (2007-09-20) paragraph [0011]; figure 1 ----- -/-	1-8

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

8 July 2009

Date of mailing of the international search report

22/07/2009

Name and mailing address of the ISA/
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Segerer, Heiko

INTERNATIONAL SEARCH REPORT

International application No PCT/IT2009/000119

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 376 456 A (BARRY JONATHAN [GB]) 18 December 2002 (2002-12-18) abstract; figure 1 page 2, last paragraph - page 3, paragraph 2 ----- EP 0 061 182 A (BOERUNG GEBRAUCHSARTIKEL GMBH [DE]) 29 September 1982 (1982-09-29) abstract; figure 1 -----	1,2,4,5, 8
X	-----	1
A	GB 2 075 462 A (PLM AB) 18 November 1981 (1981-11-18) abstract; figures 1,2 -----	1,4,5,8

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/IT2009/000119	
---	--

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
GB 2281895	A 22-03-1995	NONE		
US 4078686	A 14-03-1978	NONE		
US 2007215640	A1 20-09-2007	NONE		
GB 2376456	A 18-12-2002	NONE		
EP 0061182	A 29-09-1982	AU 8160782 A 23-09-1982 BR 8201532 A 08-02-1983 DE 3111102 A1 07-10-1982 ES 273468 U 01-03-1984 JP 58001648 A 07-01-1983 US 4390928 A 28-06-1983		
GB 2075462	A 18-11-1981	BE 888615 A1 29-10-1981 DE 3115689 A1 21-01-1982 DK 190081 A 31-10-1981 FI 811308 A 31-10-1981 GR 75225 A1 13-07-1984 JP 57008651 A 16-01-1982 NL 8102027 A 16-11-1981 NO 811289 A 02-11-1981 SE 8003298 A 31-10-1981		